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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,728	01/11/2002	Michiyo Matsushita	SHC0165	8252

7590

08/21/2003

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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/030,728

Applicant(s)

MATSUSHITA ET AL.

Examiner

Norca L. Torres-Velazquez

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 011102.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. Claims 2 and 3 have been canceled.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1771

4. Claims 1, 4-5 and 7-10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over MATHIS et al. (US 6,037,281).

MATHIS et al. discloses a cloth-like, liquid-impervious, breathable composite barrier fabrics for use in cover garments. (Column 1, lines 6-12) The reference teaches that the barrier material 10 is a laminate comprising three layers – a top nonwoven layer 12, for example, of spunbond filaments, a bottom nonwoven layer 16 formed, for example, of spunbond filaments, and a middle breathable film layer 14 formed, for example, of a microporous film. The individual layers of barrier material 10 are laminated, bonded or attached together by known means, including thermal mechanical bonding. (Column 2, lines 65-67 through Column 3, lines 1-5) The reference further teaches that the nonwoven layers 12 and 16 can be formed by substantially continuous and randomly arranged, melt-spun filaments. MATHIS et al. further teaches the use of thermoplastic polymeric materials in making the fiber or filaments from which top nonwoven layer 12 and bottom layer 16 are formed. (Column 3, lines 17-56) The middle breathable film layer 14 can be formed of any microporous film that can be suitably bonded or attached to top and bottom layers 12, 16 to yield a barrier material 10. (Column 4, lines 38-40)

The reference further teaches that based on the total weight of the film, the film layer 14 will include from about 30 to about 60 weight percent of the thermoplastic polyolefin polymer, or blend thereof, and from about 40 to about 70 percent filler. (Column 4, lines 51-55)

MATHIS et al. further teaches bonding of the barrier material to have bonds at ranges from about 10 percent to about 30 percent of the surface area of the barrier material. (Column 6, lines 49-54)

Art Unit: 1771

The reference further teaches that typical spunbond weights are between about 0.6 osy to about 1.5 osy [183-458 g/m<sup>2</sup>]. (Column 7, lines 22-24)

The barrier material of the MATHIS et al. reference exhibits a high level of breathability, as exemplified by a water vapor transmission rate (WVTR) of at least 1000 grams per square meter per 24 hours. (Column 2, lines 22-24)

Although MATHIS et al. does not explicitly teach the claimed breathability and water resistance it is reasonable to presume that said properties are inherent to the invention of MATHIS et al. Support for said presumption is found in the use of like materials (i.e. barrier material comprising two layers of nonwoven webs of continuous thermoplastic materials attached to the opposite surfaces of a middle breathable film layer by thermal-mechanical bonding). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of having a maximum breathability of about 200 sec/100 cc, and a water resistance of at least about 300 mm would obviously have been present one the MATHIS et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

With regards to claims 4 and 5, it is noted that the breathability of both the continuous thermoplastic synthetic fibers and the breathable liquid-impervious sheet are dependent on the specific composition and construction of the materials. *Ex parte Slob*, 157 USPQ 172, states the following with regard to an article claimed by defining property values:

Claims merely setting forth physical characteristics desired in article, and not setting forth specific compositions which would meet such characteristics, are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in future and which would impart desired characteristics; thus expression "a liquefiable substance having a liquefaction temperature from about 40°C. to about 300°C. and being compatible with the ingredients in the powdered detergent composition" is too broad and indefinite since it purports to cover everything which will perform the desired functions regardless of its composition, and, in effect, recites compounds by what it is desired that they do rather than what they are; expression also is too broad since it appears to read upon materials that could not possibly be used to accomplish purposes intended.

Art Unit: 1771

Thus, 4 and 5 are indefinite for reciting only the desired physical properties of the continuous fibers and the breathable liquid-impervious sheet, rather than setting forth structural and/or chemical characteristics of said materials.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over MATHIS et al. as applied to claims 1, 4-5 and 7-10 above, and further in view of HAFFNER et al. (US 6,045,900).

While MATHIS et al. teaches the use of spunbond nonwoven webs, it fails to teach that the continuous thermoplastic synthetic fibers have a basis weight of about 10 to about 100 g/m<sup>2</sup>.

HAFFNER et al. teaches a breathable barrier laminate and teaches in one of their embodiments an outer layer with about a 10 g/m<sup>2</sup> to about 70 g/m<sup>2</sup> web of polypropylene spunbond fibers. (Column 11, lines 22-25)

Since both MATHIS et al. and HAFFNER et al. are directed to breathable laminates, the purpose disclosed by HAFFNER et al. would have been recognized in the art of MATHIS et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the laminate and provide with continuous thermoplastic synthetic fibers layers with a basis weight of about 10 to about 100 g/m<sup>2</sup> with the motivation of producing a breathable barrier laminate which exhibits good breathability and barrier properties and also excellent peel strength as disclosed by HAFFNER et al. (Column 2, lines 42-44).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McCORMACK et al. (US 6,075,179)

MAYS (US 4,522,203)

Art Unit: 1771


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 8:00-4:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

NLT

August 18, 2003

  
ELIZABETH M. COLE  
PRIMARY EXAMINER